

John Engler, Governor

# **THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY**

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# **THE MICHIGAN MUNICIPAL BOND AUTHORITY**

Janet Hunter-Moore, Executive Director

Under the Authority of Part 54, Clean Water Assistance, of the Natural Resources  
and Environmental Protection Act, 1994 PA 451 and the Shared Credit Ratings Act, 1985 PA 227

**Present the**

## **FISCAL YEAR 2001 ANNUAL REPORT of the MICHIGAN DRINKING WATER REVOLVING FUND**

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## Table of Contents

I.	Introduction	3
II.	Program Contacts	3
III.	Program Structure	4
IV.	Long-term Goals	4
V.	Short-term Goals	6
VI.	Establishment of Interest Rates	9
VII.	Advantages of the Drinking Water Revolving Fund	9
VIII.	Allocation of Funds	10
IX.	EPA Automated Clearinghouse Activities	10
X.	Assurances	10
XI.	Summary	11

### Attachments

Chart 1 – Cumulative Funded Projects

Chart 2 – Category Costs

## **I. INTRODUCTION**

On August 2, 1996, the Congress of the United States passed the Safe Drinking Water Act (SDWA) amendments of 1996 (P.L. 104-182). This legislation authorized the creation of a revolving fund to provide low-interest loans to qualified water suppliers for repairs or enhancements to public water supply systems. In theory, this fund would be very similar to the State Revolving Fund (SRF) created to assist water pollution control projects.

Michigan responded to the new federal program by creating the Drinking Water Revolving Fund (DWRF). As with the SRF, the DWRF is co-administered by the Department of Environmental Quality (MDEQ) and the Michigan Municipal Bond Authority (MMBA). The MDEQ handles all programmatic issues, while the MMBA serves the program with its financial expertise.

While there are many similarities between the SRF and the DWRF, there are some notable differences. For instance, the SRF is permitted to fund only municipalities, while the DWRF may include privately owned community water suppliers. The SRF has very limited set-aside funds, whereas the DWRF makes liberal use of special set-asides to fund administration, capacity development, source water protection, source water assessments, etc. The loan repayment length in the SRF is limited to 20 years, while the DWRF can extend up to 30 years for communities that qualify as “disadvantaged.”

## **II. PROGRAM CONTACTS**

For financial issues dealing with the bonding structure, bond documents, financial detail and audit results, contact:

Ms. Janet Hunter-Moore, Executive Director  
Michigan Municipal Bond Authority  
Treasury Building  
Lansing, MI 48922  
517-373-1728

For technical reviews of DWRF projects, permit issuance, and administration of the set-aside programs authorized by the SDWA, contact:

Mr. James Cleland, Assistant Chief  
Drinking Water and Radiological Protection Division (DWRPD)  
P.O. Box 30630  
Lansing, MI 48909-8130  
517-241-1287

For program oversight, grant administration, and project management issues, contact:

Mr. Chip Heckathorn, Chief  
Municipal Facilities Section (MFS)  
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### III. PROGRAM STRUCTURE

Michigan operates the DWRF within a financing structure similar to that of the SRF. We offer loans to qualified applicants who possess at least investment grade bond ratings through their own ratings or through other credit enhancements.

For water suppliers who are municipalities with granted bonding authority, this presents no significant challenges. The DWRF sells tax-exempt revenue bonds to provide money that is used to reimburse communities for incurred costs. As the DWRF reimburses suppliers, federal funds from the capitalization grant and state funds from the grant match are transferred into a debt service reserve account to provide coverage for the leveraged bond issue.

Both the DWRF and the SRF 2001 Revenue Bonds received the highest ratings from Fitch (AAA), Moody's Investor Services (Aaa), and Standard & Poors (AAA). These ratings demonstrate a high level of confidence in the structure and administration of Michigan's infrastructure programs.

### IV. LONG-TERM GOALS

Michigan's DWRF established a new funding source designed to protect and preserve public health within the state's boundaries. Michigan's geographical identity as a Great Lakes state affords its citizens with an abundant and high quality water resource from which to draw its drinking water. Unlike many states, Michigan water supplies are plentiful and periods of restricted use are few and far between in most communities. Given our abundant water resource, the challenge for water suppliers lies in protecting the high quality of the resource as well as ensuring that adequate volume and pressure exist to deliver potable water to the customer.

In light of the interest in protecting public health, the MDEQ has undertaken efforts toward the attainment of Michigan's long-term goals as stated in the Intended Use Plan (IUP):

- 1. To maintain statewide compliance with all applicable state and federal drinking water laws, rules and standards.**
- 2. To protect the public health and environmental quality of our state.**
- 3. To implement Source Water Assessment, Source Water Protection and Wellhead Protection Programs.**
- 4. To develop strategies within the DWRF to assist smaller, economically disadvantaged communities in meeting drinking water standards.**
- 5. To promote the DWRF as a viable tool for use by Michigan water suppliers in financing their waterworks system improvements or upgrades.**
- 6. To secure Michigan's full share of federal funding and to expeditiously obligate these funds, along with the state contributions, for the construction of eligible facilities which meet state and federal requirements.**

- 7. To develop effective partnerships with other federal and state financing sources to promote efficiency in environmental review procedures and coordination of funding.**
- 8. To develop a Capacity Assessment Program for all new community and non-transient non-community water supplies, and to develop a strategy to apply to selected existing systems.**

Michigan is proud of its accomplishments in promoting compliance with all applicable drinking water requirements. Prior to the creation of the DWRF, project financing for community water supply was left largely to the local unit of government or to individuals investing in their own systems. The DWRF provides a source of infrastructure financing which assists communities in protecting both public health and well being. In Fiscal Year (FY) 2001, 10 loans were made totaling \$26,710,000. This brings the DWRF to a total assistance of \$158,965,000 for 62 water supply projects since 1997 (see Chart 1).

To achieve the long-term goal of maximizing benefits for “disadvantaged” communities, the MDEQ first defined how communities could qualify, and then identified additional benefits which would lessen the financial impact on communities. These additional incentives include loans with repayment over 30 years; use of technical assistance funds to help defray the costs of project planning; and 50 additional points in the priority scoring. To qualify as a disadvantaged community, a water supplier must:

- Meet the definition of a “municipality” as established in Sec. 5402(g). Private suppliers, such as manufactured housing communities, subdivisions, churches, or other non-municipal systems do not qualify for this designation if they are the applicants for DWRF assistance.
- Directly assess users within the area served by the proposed water supply project for the costs of construction. Municipalities that choose to assess construction costs over a wider area than the service area of the project may not qualify as a disadvantaged community unless the entire area to be assessed for the project meets the criteria set forth in Part 54. This may ease the economic impact of utility rates by spreading them over a larger user base; however, such action may not circumvent the intent to assist only those users truly unable to pay for the waterworks system improvements.
- The water supplier must also demonstrate at least one of the following:
  1. More than 50 percent of the geographic area to be served by a proposed public water supply project is identified as a poverty area by the U.S. Bureau of the Census.
  2. The Median Annual Household Income (MAHI) for the area to be served by a proposed public water supply project is less than the most recently published Federal Poverty Guidelines for a family of four in the 48 contiguous United States. These guidelines are published annually by the U.S. Department of Health and Human Services.
  3. The MAHI for the area to be served by a proposed public water supply project is less than the most recently published statewide MAHI for Michigan, and annual

user costs [as defined in 1994 PA 451, Section 5401(B)] for water supply will exceed 1.5 percent of the MAHI of the area to be served by the proposed public water supply project.

4. The MAHI for the area to be served by a proposed public water supply project is greater than the statewide MAHI for Michigan, (up to 120 percent) and annual user costs for water supply will exceed 3 percent of the MAHI of the area to be served by the proposed project.

A municipality will not qualify as a disadvantaged community if the MAHI of the service area exceeds 120 percent of the updated statewide MAHI.

## **V. SHORT-TERM GOALS**

In order to accomplish the long-term goals, we focused on more immediate objectives. Our short-term goals in FY2001 were:

### ***A. To continue our outreach effort to publicize the DWRF through direct mail, electronic media, newsletter publication, workshops, and meetings.***

Our outreach efforts have been very successful. Program managers continue to meet with interested public water suppliers, consulting engineers, and associations with an interest in water supply issues.

### ***B. To continue implementation plans for source water protection focused on statewide surface water assessments and groundwater assessments in areas tributary to the Great Lakes.***

The 1996 amendments to the federal SDWA required states to submit source water assessment programs (SWAP) by February 6, 1999 for EPA approval. Michigan's SWAP was submitted on time and approved by the EPA in October 1999. The SWAP Advisory Committee has met 11 times since 1997 to develop the SWAP and assist with technical and public involvement issues.

The intent of the SWAP is to identify the areas that supply public drinking water; inventory contaminants and assess water supply susceptibility to contamination; and inform the public of the results. Michigan has almost 12,000 community and noncommunity public water supplies with an estimated 18,000 sources to assess by May 2003. To date, 7,700 noncommunity, 25 surface water, and 300 community groundwater source water assessments are underway.

In 1997, the state of Michigan reserved the maximum allowable, one-time 10 percent set-aside for SWAP of \$5,968,110 from the initial federal capitalization of the DWRF. There were no SWAP expenditures in FY 1997, but expenditures of \$372,879 in FY1998, \$1.4 million in FY1999, \$1.1 million in FY2000, and \$825,000 in FY2001. An updated SWAP Workplan/Budget was submitted to the EPA in October 2001 and approved on December 6, 2001, to allow full expenditure of the initial SWAP set-aside through May 2003.

Major SWAP expenditures in FY2001 included completing noncommunity assessment contracts with Michigan State University Institute of Water Research and the local

health departments. Joint Funding Agreements were continued with the U.S. Geological Survey to develop the connecting channels flow model in Southeast Michigan and assist with surface water and karst source water assessments. In addition, an \$82,481 Memorandum of Understanding was fulfilled by the National Oceanic and Atmospheric Administration, National Buoy Data Center, to equip and operate a real-time weather station on Lake St. Clair to support the connecting channels flow model.

SWAP activities will continue through May 2003 to achieve the goals established by the SDWA.

***C. To enhance the State's Wellhead Protection Program.***

Efforts to enhance wellhead protection areas of community water supplies embrace two fronts. During FY2001, the DWRPD continued efforts to develop and implement local Wellhead Protection Programs under the existing voluntary state program by administering the fourth round of matching Wellhead Protection Grants. Following is the history of grant awards in this program since its inception:

FY1998	54 communities awarded \$1,010,400
FY1999	62 communities awarded \$1,080,390
FY2000	66 communities awarded \$1,036,000
FY2001	85 communities awarded \$1,281,546
Total to Date	267 communities awarded \$4,408,336

In addition, during FY2001, the DWRPD developed and implemented a comprehensive 75 percent state-share grant program to manage abandoned wells identified within delineated wellhead protection areas of community public water supply sources. The first round of Abandoned Well Management grant contracts funded under the Clean Michigan Initiative (CMI) was approved in June 2001 using \$1.2 million in authorized CMI funds. Thirty-five communities that operate public water supplies utilizing a groundwater source have started the "location" component of their Abandoned Well Management projects. Some highlights of these projects include:

- Conducting public education programs involving the hazards associated with abandoned wells
- Identifying and mapping the location of abandoned wells
- Developing technical language and specifications for bidding abandoned well plugging work
- Developing proactive abandoned well plugging ordinances

Administrative components for a statewide Abandoned Well Management Program were put into place during FY2001. Coordination for the program is provided by the Lansing office of the DWRPD. The statewide program is implemented in the field by staff in DWRPD district offices and at local health departments. Program highlights from FY2001 included:

- Performance evaluation of local health department programs included in the new Abandoned Well Management component
- Water utilities were contacted by local health departments where municipal water service line extension permits had been issued
- The DWRPD and local health departments conducted enforcement actions involving improper abandoned well plugging methods and/or materials, failure to plug abandoned wells at demolition sites, and improper plugging of abandoned wells by unauthorized persons.
- Conducted ten training programs for well drilling contractors involving removal of obstructions from, and techniques for plugging abandoned wells
- Developed specialty abandoned well plugging techniques for flowing wells, large diameter rock wells, and abandoned wells terminated in fractured rock formations

The DWRPD allocated and spent \$225,000 from the set-aside funds for the Abandoned Well Management Program. Staff expenses included two full-time equivalents that were assigned to the Groundwater Supply Section to coordinate and conduct the activities. One student assistant and one contract employee (MSU student contract) were utilized to conduct data entry of abandoned well plugging records into the state's "Wellogic" database.

***D. To implement a Technical Assistance Program for small communities.***

There are no authorized FTEs for this program. Existing staff in the DWRPD and EAD/MFS will administer it. The total set-aside allocated from the FY1998 capitalization grants for technical assistance equals \$1,612,650. During FY 2001, one community qualified for disadvantaged community set-aside funds. Lake Linden received \$9,520 from the Technical Assistance Set-Aside for reimbursement of their planning costs.

The expected uses of the funds began in FY1999. The DWRPD developed contract specifications and offered a four-year contract to provide site-specific technical assistance to community and non-transient, non-community public water supplies serving a population less than 10,000. The contract underwent a competitive bidding process and was awarded in January 1999. The contractor initiated work and expended \$33,742 in FY1999, \$139,653 in FY2000, and \$177,430 in FY2001. To date, 1,038 on-site visits and 34 training sessions have been conducted. Remaining funds in the technical assistance set-aside are available for communities that qualify as disadvantaged communities with less than 10,000 population. These moneys will be used to help defray the cost of planning for projects submitted by the local officials.

***E. To fund projects identified on the PPL.***

The DWRF provided low interest financing to ten projects totaling over \$26 million. The MDEQ and the MMBA committed all available project funds in FY2001.



***F. To coordinate the technical assistance efforts funded through the DWRF with the capacity development program to assist certain public water supplies.***

A meeting of internal stakeholders will be arranged to discuss methods of further implementing the capacity development program by coordinating activities funded by the technical assistance set-aside. Possible activities include: on-site assistance to small public water systems specifically identified by the DWRPD as lacking in technical, financial, or managerial capacity; on-site assistance to certain public water systems with planning or studies necessary to comply with state requirements; and training of waterworks operators at certain water systems on a variety of subjects to improve compliance, etc.

**VI. ESTABLISHMENT OF INTEREST RATES**

The primary advantage for Michigan water suppliers is their ability to borrow funds at below market rates. The DWRF interest rate is established prior to each new fiscal year. As identified in Part 54, 1994 PA 451, determination of the interest rate is based on demand, market conditions, program costs, and future needs. Since a portion of the state match in any given fiscal year may be financed with State Revenue Match bonds, the upcoming year's interest rate must also account for the expense incurred in securing these bonds.

The DWRF is unique when compared to the SRF, in that both municipal and non-municipal water suppliers may participate if they are qualified. In assessing the market conditions for each type of entity, it was quickly apparent to MDEQ staff that a municipality would enjoy lower rates of interest on the open markets than would a private, non-municipal supplier who would normally have to obtain financing through commercial lending institutions.

Based on the knowledge that market conditions generally demand higher rates of interest for non-municipal borrowers, and on the limitations of having to serve them through a direct, non-leveraged program structure, the director of the MDEQ has determined that the DWRF will provide similar subsidy rates to both municipal and non-municipal borrowers. The interest rate in FY2001 was 2.5 percent for municipal borrowers, and a 2.5 percentage point buy-down of interest for private water suppliers, although no private water suppliers were on the Project Priority List.

**VII. ADVANTAGES OF THE DWRF**

Apart from the low interest rate, suppliers also benefit from the DWRF in that they can finance all eligible waterworks system costs. The major benefit results from the fact that water supply financing in the past has always been left to the local units of government or private entities. Historically, there has been no significant state financial assistance available to local officials in meeting water supply needs. The DWRF will provide an on-going source of funding to maintain or improve drinking water quality and public health.

In addition, the on-site technical assistance, opportunities for source water assessment and protection, operator training and certification program, and the abandoned well management program provide a blend of direct and indirect aids to local communities across Michigan.

## **VIII. ALLOCATION OF FUNDS**

Allocation of funds among eligible uses is based on a three-step process. First, the MDEQ identifies the new sources of funds to be added to the revolving fund and the spending limits for the DWRF within the given fiscal year. Next, a determination of the type and amount of financial assistance necessary for each supplier is made. Finally, funds are allocated among the projects consistent with amounts available and the project's priority standing.

The following identifies the new sources of funds available to the DWRF for FY2001:

FY2001 Title IX Funds	\$22,916,200
FY2001 State Match	<u>\$ 4,583,240</u>
<b>Total</b>	<b>\$27,499,440</b>

In FY 2001 Michigan's DWRF requested set-asides for the following:

• DWRF Administration	\$ 916,648
• Small Community Technical Assistance	\$ 456,438
• Source Water Protection	\$ 225,000
• Capacity Development	\$ 450,000
• Operator Certification	\$ 500,000
• Wellhead Protection	\$1,000,000

An application for a capitalization grant resulting from FY2001 federal appropriations was submitted by the department to the EPA. This application requested \$19,368,114 in federal funds, with a \$4,583,240 state match. This match consists of \$1,175,000 from an in-kind contribution credit against the Public Water Supply Supervision program administered by the DWRPD. The in-kind match meets the dollar-for-dollar requirement for source water protection, capacity development, and operator certification. The cash match meets the overall 20 percent program match requirement.

The governor of each state may, at his or her discretion, transfer 33 percent of available moneys between the SRF and the DWRF programs. This may occur starting one year after a state receives its first capitalization grant for project funds. This option was not considered during the period covered by this annual report.

## **IX. EPA AUTOMATED CLEARINGHOUSE ACTIVITIES**

As the federal capitalization grants for the set-aside funds were awarded, EPA processed automated clearinghouse requests for increases to the state's draw capabilities. In FY2001, \$4,287,475 was drawn for the set-asides. In addition, \$31,801,827 was drawn for loan expenditures in FY2001.

## **X. ASSURANCES**

The final guidelines from the EPA set forth provisions that the state must give certain assurances in order to qualify for capitalization grant funding. These assurances were incorporated into the Operating Agreement signed by the EPA, the MDEQ and the MMBA on December 9, 1997. Along with federal and state law, the Operating

Agreement serves as the framework by which Michigan's DWRF program operates. The MDEQ and MMBA have fulfilled the stated assurances throughout the operation of the DWRF during this fiscal year.

## **XI. SUMMARY**

Of the total \$26,710,000 loaned to ten projects during the fiscal year, the cost breakdown of categories is as follows (see Chart 2):

• I. Transmission/Distribution	\$ 5,310,854
• II. Treatment	\$17,329,968
• III. Storage	\$ 3,239,079
• IV. Source	\$ 830,099
• V. Other	\$ 0

In FY2001, seven projects initiated operation. This brings the total to date to 41.

Over the course of the year, the MDEQ and MMBA processed \$ 36,089,302 in actual disbursements. This included \$833,730 in disbursement requests for MDEQ and MMBA administrative costs. Non administrative set-aside requests added another \$3,453,745.

Prior to September 30, 2000, the MDEQ was already at work preparing projects that were vying for FY2001 funding. Project plans from interested communities were due to the MDEQ on May 1. The Intended Use Plan and Project Priority List were prepared and a public hearing was held in August. Like FY2000 projects, these projects received an environmental review by the project managers and district engineers in the MDEQ.